



CITY OF ARCHDALE

CITY COUNCIL

MEETING DATE: Tuesday March 22, 2022

SUBJECT: Water and Sewer Extension Request for Property along Archdale Road, being Randolph County Parcel # 7717957195

RECOMMENDATIONS OR COMMENTS: Staff has been approached by Ellis Developments out of Raleigh, NC to consider a large development consisting of single-family residential, townhomes, and a small commercial tract. The property is currently zoned R-40 with a Future Land Use Plan (FLUP) designation of Countryside. This is due to the property not being directly served by Archdale utilities.

Staff has told the applicant that a rezoning cannot be considered until a water and sewer extension request is approved by City Council due to the lack of available services and the FLUP designation. Upon internal review of the request, staff, along with the city's contracted engineer at Jamestown Engineering do not believe this request is viable at this time. The City has concerns about being able to serve its current service area and wants to be able to focus efforts on approved developments occurring within the current city limits. Over the next couple years, more data will be collected through the AIA study to help determine downstream capacity, especially through Creekside Park, which will help determine what can and cannot be served outside the City's service area.

SUMMARY OF ATTACHED INFORMATION: Water and Sewer Extension Request Application, Memorandum from Jamestown Engineering, Water and Sewer Extension Schematic Maps

ATTACHMENTS: ☒ YES ☐ NO



CITY OF ARCHDALE

307 BALFOUR DRIVE
P.O. BOX 14068
ARCHDALE, NORTH CAROLINA 27263

PHONE: (336) 431-9141

FAX: (336) 431-2130

APPLICATION FOR EXTENSION OF WATER/SEWER SERVICE

Owner/Applicant Information

Name of Owner: Ponderosa White Heirs LLC
Name of Applicant: (if different then owner) Ellis Developments Group
Address: 6801 Falls of Neuse Rd Suite 108, Raleigh, NC 27615
Phone: 484-797-0627

Applicant's Construction Contractor (if known at time of application)

Name: N/A
Address: N/A
Daytime phone #: N/A

Property Information

Tax Parcel Map I.D. No. (s): 25134 (PIN 7717957195)
Deed Book: 002526 Page: 00668
Present Use: Agriculture/Vacant
Proposed Use: Residential / Mixed-Use
Acreage: 127.50
Present Zoning: R-40
Proposed Zoning: TBD
Reason for Connection Request: Planned rezoning request to be filed for the property.

Type of Utility Extension Request:

☐ Water ☐ Sewer ☒ Both

Estimated Linear Feet of Extension: 12,500

(Engineer Review Fee = \$ 100 + \$ 5 every 100 Linear Feet)

All applications must comply with the Water and Sewer Extension Policy of the City of Archdale. All applicants must submit engineered drawings and review fees as set forth by the Schedule of Fees, along with their formal application to the City Engineer prior to City Council review. The official Water and Sewer Extension Policy and a Petition Requesting Annexation may be obtained from the City of Archdale.

Upon receipt of a complete application to extend water and/or sewer mains, the City Engineer will review the feasibility of providing service to the applicant and report his/her findings to City Council. If the City Engineer determines that the applicant's request is feasible, then the City Council may consider any or all of the following five options:

1. Install the extension at the City's expense.
2. City approve and allow the applicant to install the extension at his/her expense.
3. The City install the extension at the applicant's expense.
4. City install and jointly finance the extension in cooperation with the applicant.
5. Deny the request.

This request, if approved, becomes an agreement to the following:

All applicants requesting water and/or sewer service outside the City limits shall file a petition with applicable processing fee for annexation to the City. The City will generally consider annexation and extension of utilities to areas within the growth area, though areas outside of the growth area may be considered. Failure to file a petition for voluntary annexation or satellite annexation on notice from the City will result in immediate termination of water and/or sewer service. The final decision to act upon an annexation petition will rest with the City Council.

Privately funded extension projects constructed by the applicant shall be reviewed and approved by the City prior to the applicant submitting the plans to any other review agency. The facilities shall be constructed by a licensed utility contractor and must be constructed to City standards. The facilities must be extended to the far edge of the applicant's property in order to make the facilities available to adjacent property owners.

The owner agrees to provide the necessary easements and such other documents as to transfer ownership of this extension to the City. The City shall thereafter operate and maintain this extension. The Owner agrees that the property shall not be further divided or subdivided to create more lots or principal building sites until the property is within the corporate limits of the City of Archdale.

The Owner agrees to not oppose or support opposition to an annexation initiated by the City of Archdale that includes any or all the property to which water and sewer service was provided by the City of Archdale in lieu of annexation.

The undersigned hereby certifies that he/she has read and examined this application and that the proposed water/sewer main extension is accurately represented in the statements made in and plans submitted with this application. The undersigned hereby applies for a water/sewer main extension and agrees to conform to all rules and regulations pertaining to the Archdale water and sewer system.

Signature (Applicant or Applicant's Representative): Matt Hook

Date: 2/11/2022

Print: Matthew Hook



JAMESTOWN ENGINEERING GROUP, INC.

**CIVIL ENGINEERS & SURVEYORS
LAND PLANNING • MUNICIPAL CONSULTING**

**117 East Main Street • P.O. Box 365 • Jamestown, N.C. 27282
Telephone (336) 886-5523 Fax (336) 886-5478
www.jamestownengineering.com**

Memorandum

March 15, 2022

To: City of Archdale, North Carolina
Planning Department

From: Daniel W. Pritchett, PE & PLS
Jamestown Engineering Group, Inc.
Job No. 2021-005

A handwritten signature in black ink, appearing to read 'D. Pritchett', is written over the 'From:' line of the memorandum.

Re: Property of Ponderosa White Heirs, LLC
REID: 25134

The Ellis Development Group has submitted an Application for Extension of Water and Sewer Service to support the proposed rezoning of the 127.5-acre tract owned by Ponderosa White Heirs, LLC. Previous plans submitted by the Developer indicated single family and multi-family housing totaling 374 units proposed on the site. The Developer has also submitted a Preliminary Utility Layout indicating the proposed locations and sizes of force mains and water lines necessary to tie into the City's existing system. Wastewater flows from the proposed 374-unit development have been estimated to total 132,640 gallons per day, requiring pumps capable of discharging 250 gallons per minute (GPM) through a 6" force main. This force main is proposed to tie into the City's existing 12" gravity system on Tom Hill Road north of the Norfolk Southern Railway. The Preliminary Layout also proposes a 12" water line extension from the site along Archdale Road and Lane Drive to tie into an existing 12" water line on Lane Drive.

Since all on-site and off-site water and sewer extensions are subject to future verification for conformance with City and State standards, the scope of this memorandum will be limited to identifying any potential adverse effects the demands of the proposed development could have on the City's existing infrastructure and users. It should be noted that the City has adequate contracted water and wastewater treatment capacities to provide service to the proposed 374-unit development.

The 12" water line extensions proposed to service the development are indicated to tie into an existing 12" water line on Lane Drive. This 12" water line was installed along the frontage of property developed in the mid 1980's as part of the Ridge Creek Development. The City required the line size to be increased at that time as part of a

long-range plan to provide a southern loop to the City's water system. This loop included a future 12" line to the west and north along Tom Hill Road to tie into the 16" main on South Main Street. The existing 12" line is supplied by a 6" line on Gregg Street, which has been sufficient to meet demands of the Ridge Creek Subdivision. Pending verification by a hydraulic analysis, it is unlikely that the 6" line will be capable of meeting demands of the proposed 374-unit development. Additional water line extensions along Tom Hill Road to South Main Street should be anticipated as a requirement to maintain an acceptable level of service to the proposed development, and maintain current service levels to existing customers in the Gregg Street area. Current City policies would require the City's participation in potential up-sizing costs associated with the 12" line installation on Tom Hill Road, Lane Drive, and Archdale Road.

The 6" sewer force main proposed by the Developer to service the site would discharge 250 GPM into the 12" gravity main on Tom Hill Road. The 12" gravity line currently transports approximately 350 GPM of waste flow from the Wyndemere pump station. Pending a hydraulic analysis, it is likely that the 12" line would be capable of transporting discharges from both pump facilities. It should be noted that this could limit increases in future waste flows from the Wyndemere area and future land use west of Tom Hill Road along South Main Street. Prior to any additional discharges from the proposed development, it will be necessary to upgrade the existing 8" sewer line from Mose Drive through Archdale Park to the existing 18" gravity outfall along Muddy Creek. Current flow rates within the existing 18" outfall from the park area to the Weant Road pump station is not known. The City has recently contracted with Withers and Ravenel to assess waste flow patterns within the City's outfall network. Other factors that should be considered prior to accepting additional flows to the existing outfall system are as follows:

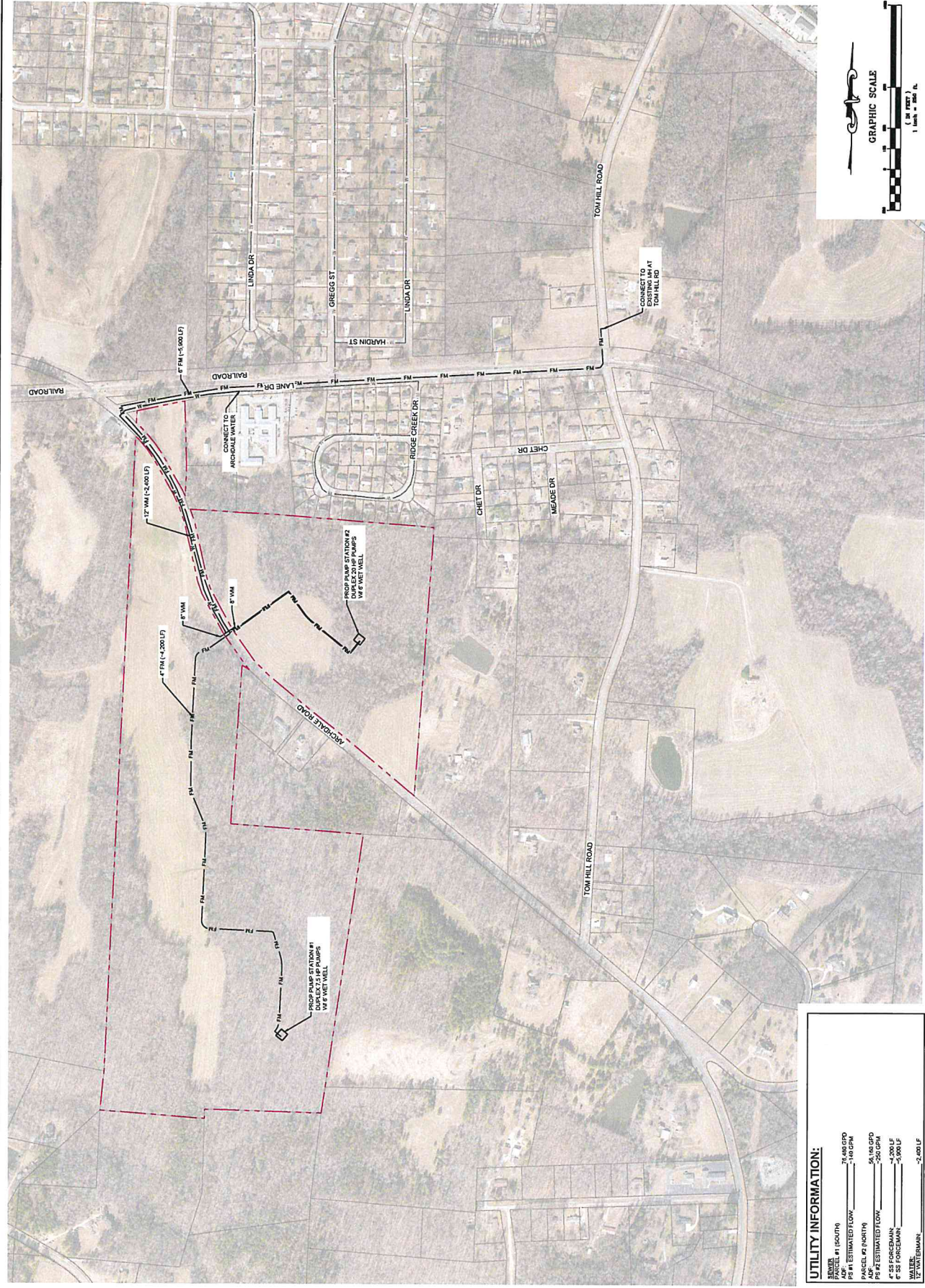
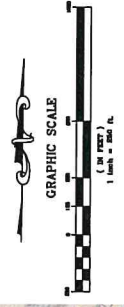
1. The City's original outfall system was designed to transport wastewater flows from the City boundaries in the early 1980's. At that time, the boundaries were limited to the Muddy Creek drainage basin within the Randleman Watershed. Since that time, the City has expanded sewer service into the Uwharrie River and Carraway Creek drainage basins, which include the Uwharrie, Oak Forest, and Wyndemere pump stations.
2. Future sewer capacity demands of undeveloped properties within the current corporate limits.
3. The reduction in capacity resulting from rain related inflow to the sewer collection system.

These factors are being evaluated as part of the AIA study being implemented by Withers and Ravenel. Until more information is received and evaluated, it would be difficult, in our opinion, for the City to commit to approving additional sewerage flow into their existing sewer outfall system.

ELLIS - ARCHDALE - WHITE TRACT
PUMP STATION
PRELIMINARY LAYOUT
TOWNSHIP, ARADOUGH COUNTY, NORTH CAROLINA

STRONGROCK
ENGINEERING GROUP
6801 FALLS OF NEUSE RD, SUITE 100 RALEIGH, NC 27615 | JOSH@STRONGROCKENGINEERING.COM
STRONG ROCK PROJECT
DATE
SCALE
AS SHOWN
DATE
BY
DATE

PRELIMINARY



UTILITY INFORMATION:

PRINCE	71,480 GPD
PRINCE #1 (SOUTH)	71,480 GPD
PRINCE #2 (NORTH)	54,160 GPD
PRINCE #3 (NORTH)	54,160 GPD
PRINCE #4 (NORTH)	54,160 GPD
PRINCE #5 (NORTH)	54,160 GPD
PRINCE #6 (NORTH)	54,160 GPD
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